1910
(Agriculture)
F/No. 77/1910
S. No 1-3

Sub:. proposal to give encouragement to private gentlemen for introducing improved methods of manufacture of Jaggary and sugar by using mechanical power

Previous references.

Agri 83-09 (84/1-5)

1910.
(Agriculture)

File No. 77 of 1911

Serial Nos. 1-3

Later references.

Agri 41-11
Nos 1-3

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 1-3

Part B. for March 1911

SUBJECT.

Response to give encouragement to private gentlemen for introducing improved methods of manufacture of jaggery & sugar by using mechanical power

1. From the Rev. Comr., No. 6519 dt. 15-12-10

Submits the Bangalore Dy. Commissioner's report on the measures adopted by Messrs Krishnaiyangar of Gorgahalli, Chennareddi of Hoodi and Ramareddi of Agaram for the manufacture of jaggery by means of mechanical power

2. To the Rev. Comr. & Chief Engineer, No. 5723-47-3-11

G. R. S. 5.

Records the Rev. Comr's letter and the Chief Engineer's unofficial note and directs the publication of the

Bangalore Dy/Comrs report with enclosures as a supplement to the Mysore Gazette for general information.

B Letter Comptroller, Mysore Gazette. O.M. No 5728 &
7.3.11
Submitted. Mr. Bangalore Dy/Comrs letter.

G.R.S. 11] 1910.

GENERAL AND REVENUE SECRETARIAT

(Agriculture

NOTES.

File No. 77-10.

FILE HEADING.

Encouragement to private gentlemen for introducing improved methods of manufacture of jaggery & sugar by using mechanical power.

From

The Rev. Comm^r in Mysore

No. 6579 Dated 15/12/10 Received 19-12-10

Diary No. 3244 | Enclos. 3 | Spare Copies | Serial No. 1

BRIEF ABSTRACT OF LETTER.

Submits Bangalore Dy Comm^rs report on the measures adopted by Messrs Krishnaswamy (of Oorgaum) Gurnvareddi (of Hoodi) and Ramareddi (of Agaram) for the manufacture of jaggery by means of mechanical power

NOTES AND ORDERS.

The reports submitted show that the enterprise of the 3 gentlemen referred to above has so far been very successful. As some difficulty is stated to be experienced by them in the working of the Engines owing

NOTES—First sheet.

GPB—15,000—24-4-09

Serial No.

to want of knowledge on their part of the details of working of the machines, the Rev Commr suggests that the Executive Engineer, Hesaraghatta Division may be asked to ~~give~~ help them by giving advice or services of departmental hands without any charge, except in cases of gross negligence on the part of the owners and also to have the skill of the drivers of the engines tested and to insist on the owners engaging only men with some training to be given gratis in the Hesaraghatta Division.

The Chief Engineer may be consulted in the matter.

Subd for orders

Sam 21/12/10 (55)

The great thing in the introduction of improved agricultural methods and appliances is that they should avoid failure in the commencement as much as possible and every facility should be provided by Govt to obtain expert advice and guidance. The Rev Commr may therefore favourable consideration

Rev-cell. No 55-R 0723 dt December 1910

Forwarded with thanks to the

G. R. S. 12]
General and Revenue Secretariat.

Mf File No. 77 of 19 10

Serial No.

Chief Engineer

B.6

Petitioner

22/12/10.

For Locating

Received 24/12/10

C.No. 241 (P.W.D.)
dt. 24-12-10.
Enclosures as per
list attached.

Forwarded with papers to the Executive Engineer, Water Supply & Stores Division, for favour of reply whether he can comply with the request made by the Revenue Commissioner in his letter No.6519 dated the 15th instant.

Secretary

For Chief Engineer of Mysore

Bangalore,
31st December 1910

SECRETARY'S OFFICE
No. 655
28 JAN. 1911
MYSORE P. W. DEPT.

No 588 dated 27-1-1911.

I have the honour to report that I will be pleased to help the private gentlemen with professional advice when requisitioned for, also in testing the skill of the drivers. I have no objection to train up a few men in the workshop that may be sent by the Rev. Commissioner; but the number so selected should not be more than 2 or 3 at a time without cost. As regards deputing workshop men for Repair works, I regret I will not be able to do so unless the gentlemen requisitioning the services of the men agree to pay their wages, as it must be remembered that the

NOTE—Contn. sheet.

GPB—50,000—12-8-10

Serial No.

work shop is run on commercial lines and the workmen are paid by day and not monthly, like permanent ~~hands~~ Establishment.

Yours in the Union.

Bangalore.
27. 1. 11

Executive Engineer.
W. S. & S. D.

No: 1092 Dy 10th February 1911

Returned to the Secretary to Govt., Genl & Rev Deptt.

I
14/2
Rvr.

2. The Executive Engineer is prepared to take two or three men at a time for training in the workshop.

3. As regards the execution of repairs, &c, the charge should be borne either by the Revenue Department or by the owners themselves.

4. The Executive Engineer will carry out the work promptly if the Revenue Commissioner undertakes the responsibility of paying for it.

5. It is imperative that such proposals as "free water supply", "free mechanical help", &c, should be severely discouraged in future, if Govt. desire to avoid irresponsible

NOTE— Contn. sheet.

GPB—50,000—12-8-10

G. R. S. 12]
General and Revenue Secretariat.

Apr File No. 77 of 1910

(5

Serial No.

Expenditure in this Department.

Bangalore 7
10th Feb 1911 } Memorandum for Chief Engineer HM of Mysore

Subd for orders
Sec
(53) 15/2/11 Read with the accompanying letter from the Executive Engineer, Water Supply & Sewerage Division, will arrange to train annually a certain number of men not exceeding 2 or 3 at a time selected by the Resident Engineer & take the engine but if any repairs have to be made to machinery or the services of skilled drivers are required already employed by the department the cost will have to be paid by the proprietors of the machinery concerned
15/2/11

Draft Subd
Sec
(53) 16/2/11 Secy / a 1911 Dewan 17/2/11

NOTE.—Contn. sheet.

GPB—50,000—12-8-10

10197
18.2.11 Draft sanctioned 17/2/11

G. R. S. 12]
General and Revenue
Secretariat.

hi File No. 77 of 1910

6

Serial No.	
	Approved - The Executive has agreed that the proposal - the Press should not publish the letter as such as this might lead to complications may be cited precedent.
	Issue
	25/2/11
	Draft Govt memo publishing the report in the Gazette is also submitted for approval
	Sanction (53) 28/2/11
	28/2/11
2	To The Resr Comm in Mysore & The Chief Engr of Mysore Govt No. R 5123-4 of 7.3.11. Records the Resr Comm's letter (5 Nos) and the Chief Engr's accompl note & directs the publication of Bangalore Dy Comm's report with Enclosures as a supplement to the Mysore Gazette for general information

NOTE—Contn. sheet.

BPG—55,000—27-1-09

G. R. S. 12]
General and Revenue Secretariat.

Agr. File No. 77 of 1910

(7)

Serial No.	
3	To the Compiler, Mysore Gazette Offl. Memo No R 5125-8/3.11 Publishes the Bangalore Dy Comm's report with enclosures regarding the measures adopted by certain private gentlemen for the manufacture of Jaggery, for General information.
	The report with enclosures has been published as Supplement to the Mysore Gazette of 16.3.11.
	The report received in original may now be returned to the Rev. Comm'r in Mysore as printed Spare copies thereof have been obtained from the Press.
R 5404 23/3/11 Enforce	Memo returning the Encls. is subd for Signature
	Name (SS) 23/8/4 BHG 23/3/11 Memo signed. No R 5404 of 23/3/11

NOTE—Contn. sheet.

BPG—55,000—27-4-09

Agri 77-10-1

No. 6579
1 & 2 files

OFFICE OF THE REV. COMR. IN MYSORE,

Bangalore, 15th December 1910. 191

17

FROM

Rajakarya Pravina
A. RANGASWAMI IYENGAR, ESQ., B. A., B. L.,
Revenue Commissioner in Mysore.

To

The Secretary to the Government of
His Highness the Maharaja of Mysore,
General & Revenue Departments.

SIR,

Ir continuation of my letter No. 1207-6 dated 27th May 1910 (recorded with Government Proceedings No R. 40-41/Agri.83-09-5 dated 4th July 1910), I have the honor to submit herewith, in original, for perusal and kind return, letter No. 444 dated 7th December 1910 (with its enclosures) from the Deputy Commissioner, Bangalore District, reporting on the measures adopted by Messrs. Urgahalli Krishna Iyengar, Guruvareddi and others for the manufacture of Jaggery and to suggest that the Executive Engineer, Hesarghatta Division, may be asked to give help in this direction as readily as possible, without levying any charges for such advice or services of departmental hands except in cases of gross negligence on the part of the ownwers. The Executive Engineer may also be asked to have the skill of the drivers tested and to insist on the owners engaging only men with certain training to be given gratis in the Hesarghatta Division.

I have the honor to be,
Sir,
Your most obedient servant,
K Subba Rao
For Rev. Commissioner

B.S.

I 19/12 Rw

Stacy

191 - 191

41 3244

From

RAJAKARYA PRAVINA

A. Rangaswami Iyengar, Esq., B. A., B. L.,

Revenue Commissioner in My[illegible]

To

The Secretary to the Government of
H. H. the Maharaja of Mysore,
General & Revenue Departments.

16th December 1910.

Dated 16th December 1910.

Despatched 17

Received

General No. 6519.

Enclosure No. 1 & 2 files

SUBJECT.

Submitting Bangalore Deputy Com-missioner's letter No. 444 dated 7th December 1910, reporting on the measures adopted by Messrs. Ugrahalli Krishna Iyengar, Guruvareddi and others for the manufacture of joggery.

Caxton Press, Bangalore, 2000—6—10.

G.R.S. 28.]

Draft 4 Copies

(2

Agr. File No. 77-40
Serial No. 2

Diary No. of letter replied to 3244

Proceedings of the Government of His Highness the Maharaja of Mysore.

GENERAL AND REVENUE SECRETARIAT.
( )

, the 19

Date of issue 7/2/11

Signed by Mr P.R.s. D'Souza

READ— Letter no 65-19 d. 15th Dec 1910 from the Rev Canon in Mysore; submitting letter no 444 d. 7.12.10 Addressed to the Dy Comr

ORDER THEREON.—No.—

Bangalore D^t, reporting on the measures adopted by Messrs Ekamballi Krishna Iyengar & Gurumakesar & Sons for the manufacture of Jaggary

over

SUBJECT.

and making certain Suggestions
for affording help to the
gentlemen by way of expert
advice &c.

2. U.O Note No 1092 dt 10-2-11
by the Chief Engr of Mysore:—
Note no 58 dt 27/1/11 by
the Executive Engineer, Water Supply
& Sewerage Div with the opinion of
the Chief Engineer thereon,
"I have the honor to report
in this Dept".

p. 3 - s
of the
Mysore
notes.

K.
28/2/11

Order thereon

(4

G.R.S. 28.]

File No. 77-10

Serial No.

Diary No. of letter replied to 3264

Proceedings of the Government of His Highness the Maharaja of Mysore.

GENERAL AND REVENUE SECRETARIAT.

( )

the 19

Date of issue 7. 3. 11

Signed by Mr D'Souza

READ—

Letter no 6519 dt 15-12-10 from the Rev. Convent in Mysore (Print in Extenso Together with Enclosures)

2. Memo Note no 1092 dt 10-2-11 by the Chief Engineer of Mysore

ORDER THEREON.—No.

Recorded - R5123-5. 7/3/11

1. The Chief Engineer is requested to issue the necessary instructions to the Executive Engineer, Water Supply & Stores Division to help private

over

2 The Dy Cs Report with the Enclosures may be published as a Supplement to the Gazette for general information

SUBJECT.

GPB—10,000—9-12-09

gentlemen engaged in the manufacture of Jaggery or Sugar by mechanical power, with professional advice when requested and also in testing the skill of the drivers of the Engines kept by them. Arrangements should also be made by the Executive Engineer to train annually a certain number of men, not exceeding 2 or 3 at a time, to be selected by the Rev. Comm'r in Mysore to work the Engines. ~~Part if any~~ Repairs ~~have to be made to~~ can be made in the P.W.D. workshops the machinery or the services of skilled workmen already employed ~~by the~~ in the P.W.D. ~~workshops are required, the necessary~~ can be made available if cost should be paid by the proprietors of the machinery concerned. undertake to pay the cost thereof.

Part

C.E.
17/11

Offg Secy

to
The Rev. Comm'r in Mysore
" Chief Engineer of Mysore

16/1/..

16.2.10

(6

Proceedings of the Government of His Highness
the Maharaja of Mysore.

R e a d:-

Letter No.6519 dated the 15th December 1910 from the Revenue Commissioner in Mysore, submitting letter No.444 dated the 7th December 1910 from the Deputy Commissioner, Bangalore District, reporting on the measures adopted by Messers Urgahalli Krishniengar, Huruva Reddy and others for the manufacture of jaggory and making certain suggestions for affording help to the gentlemen by way of expert advice etc.,.

2. Unofficial Note No.1092 dated the 10th February 1911 by the Chief Engineer of Mysore:-

(Note No.58 dated the 27th January 1911 by the Executive Engineer, Water Supply and Sewers Division with the my opinion of the Chief Engineer thereon.)

I have the honour to report that I will be pleased to help the private gentlemen with professional advice when requisitioned for, also in testing the skill of the drivers. I have no objection to train up without cost a few men in the work-shop that may be sent by the Revenue Commissioner; but the number so selected should not be more than two or three at a time. As regards deputing work-shop men for repair works, I regret I will not be able to do so unless the gentlemen requisitioning the services of the men, agree to pay their wages

as

as it must be remembered that the work-shop is run on commercial lines and the workmen are paid by day and not monthly, like permanent establishment.

- - - - - -

(Chief Engineer's opinion on the above, No.1092 dated the 10th February 1911:-)

"Returned to the Secretary to Government, General and Revenue Department.

2. The Executive Engineer is prepared to take two or three men at a time for training in the work-shop.

3. As regards the execution of repairs, etc., the charge should be borne either by the Revenue Department or by the owners themselves.

4. The Executive Engineer will carry out the work promptly, if the Revenue Commissioner undertakes the responsiblity of paying for it.

5. It is imperative that such proposals as "free water supply","free mechanical help" etc., should be severely discouraged in future, if Government desire to avoid irresponsible expenditure in this Department".

- - - - - - - -

Order thereon, No. R5123-4
Agt.77-10-2

Dated Bangalore, the 7 March 1911.

Recorded.

(8)

2. The Deputy Commissioner's report with its enclosures will be published as a supplement to the Gazette for general information.

Offg. Secretary to Government.

To

The Revenue Commissioner in Mysore,

The Chief Engineer of Mysore.

S.M.
4

G.R.S. 26]

Diary No. of letter replied to 3244

General and Revenue Secretariat
( )
the 19

Date of issue 7/3/11

Signed by Noel R. Co. D'Souza

2 Drafts

Agn. File No 77-Co
Serial No. 3

No. RC 5125 dt 7/3/11
Encl

To

offlmeind.

The accompanying Report of the Dy Commr, Bangalore Dt, on the measures adopted by certain private gentlemen for the manufacture of saffron is hereby published for general information.

By order

for Mr Secy
2/3/11

Here type Letter no
R C 444 dt 7-12-10 from the Dep. 2 0

To the Compiler Mysore Gazette for publication as a Supplement to the Mysore Gazette & for the supply of 12 Spare copies to this office.

SUBJECT.
Agr.
(63) 28/2/11
HMG

H.E. Comm. Bangalore to the Resident in Mysore Together with its Enclosures

List of enclosures,

Copied by

Examined by

GPB—6,000—1-5-09

SUPPLEMENT TO

The Mysore Gazette

PUBLISHED BY AUTHORITY.

BANGALORE, THURSDAY, MARCH 16, 1911.

NOTIFICATION.

No. R. 5125—Agri. 77-10-3, dated 7th March 1911.

OFFICIAL MEMORANDUM.

The accompanying report of the Deputy Commissioner, Bangalore District, on the measures adopted by certain private gentlemen for the manufacture of jaggory is hereby published for general information.

By Order,

C. S. BALASUNDARAM IYER,
Officiating Secretary to Government, General and Revenue Departments.

Letter No. R. C. 444, dated the 7—8th December 1910, from the Deputy Commissioner, Bangalore District, to the Revenue Commissioner in Mysore.

With reference to your Memo No. 12077, dated the 27th May 1910, forwarding copy of your letter No. 12076, dated the 27th May 1910, to the Secretary to Government, General and Revenue Departments, *re* improving the quality of jaggory and calling for a full report on the measures adopted by Messrs. Urgehalli Krishniengar, Guruva Reddi and Agaram Rama Reddi for the manufacture of jaggory, etc., I have the honour to state that Mr. C. S. Kuppusami Iyengar, Assistant Commissioner, Clospet Sub-Division, and Mr. A. Hayes, the then acting Assistant Commissioner and Civil Officer, Bangalore, were deputed for personal inspection of the plant and machinery set up by the above raiyats with a request to submit a full and clear report on the operations connected, the measure of success so far achieved and necessity for expert guidance and help. Each of the above officers has submitted a detailed report on the points asked for. The reports which are expansive and give the necessary information are enclosed herein in original.

2. From the report of Mr. Kuppusami Iyengar, it will be seen that 38 acres have now been planted with sugar cane by Mr. Urgehalli Krishniengar and the number of shoots is estimated at 3 lakhs. The engine installed by this gentleman is being worked by a local trained man and no necessity is felt for expert advice. The number of men employed for work daily is said to be 150 and the mill is reported to be working between 16 to 18 hours a day.

3. Mr. A. Hayes personally inspected the mills employed by Messrs. Guruva Reddi and Agaram Rama Reddi; both these mills working from 6 A.M. to 6 P.M. and the number of coolies employed being 50 and 80 respectively. From this officer's report it will be seen that these two raiyats have planted sugar cane on an average extent of 50 and 20 acres of land respectively and the number of shoots is estimated at about 5 lakhs and 2 lakhs. The machinery employed by these two persons stopped action on one or two occasions when expert men had to be sent for on this ground. Messrs. Guruva Reddi and Rama Reddi represented to Mr. Hayes that they require expert advice and guidance as the want of adequate knowledge of the machinery and its working causes much inconvenience at times.

4. It is evident from the Assistant Commissioners' reports that milling with machine is much more profitable than milling with iron mills worked by bullocks.

ENCLOSURE No. I.

Report of Mr. C. S. Cuppusami Iyengar, Assistant Commissioner, dated 14th November 1910.

As desired, I paid a visit to the Urgehalli Kayamgutta village yesterday morning. Mr. Krishniengar met me and took me round the estate.

2. He has installed an oil engine (6½ H. P.) of the Hornsby patent and works a centrifugal pump, a sugar cane mill and a ragi thrashing machine with it. The oil engine was got from Messrs. Massey and Co., Madras, and the sugar cane mill was imported from A. W. Smith & Co., Glasgow. Each of them is said to have cost Rs. 1,700. Both of them were installed in January 1906, and cane was milled with the power mill in 1906, 1907, 1908 and 1909. There was no sugar cane crop in 1910. Now 38 acres have been planted with sugar cane and the number of shoots is estimated at 3 lakhs. The cane will be ready for milling in January. Mr. Krishniengar explained to me the working of the oil engine and the mill. He told me that the mill is worked between 16 to 18 hours a day, that about 150 men are engaged each day and that the quantity of jaggory made per day is 200 maunds of 27 lbs. Milling with engine power is said to be about 40 to 50 per cent more profitable than the old method of milling with iron mills worked by bullock power. It is also said that the engine power mill, gives 25 per cent more juice. Mr. Krishniengar thinks that it will take about 2½ months to mill three lakhs of cane.

3. No sugar is made for the present. Mr. Krishniengar, informed me that he intends ordering for sugar evaporating plant.

4. The oil engine is being worked by a locally trained man and has till now given no trouble. Mr. Krishniengar does not feel any need for expert advice.

5, A loan of Rs. 9,000 has been sanctioned. Mr. Krishniengar has taken only Rs. 2,000 out of it and has utilised the amount in getting out the pumping plant, construction of wells for pumping purposes, etc. He says he will take the balance of the loan when he orders for the sugar evaporating plant.

6. The oil engine, mill, etc., are installed in a building roofed with corrugated iron. Eight pans have been provided for heating the juice and these are also placed in the same building.

7. The engine is also used to work the pump when the tanks become dry and water is required for irrigation purposes.

ENCLOSURE No. II.

Report of Mr. A. Hayes, Acting Assistant Commissioner.

In obedience to No. 2926, dated the 8th June 1910, I beg to submit the following report regarding the sugar cane mill imported by Guruva Reddi of Hudi. I have already separately submitted a report regarding the mill imported by Rama Reddi and a copy of which I have enclosed herein.

The mill cost about Rs. 2,000 and the oil engine with its appurtenances about Rs. 2,000 also. They arrived about the end of last year, after the milling season, and had to be kept by till a building was ready.

5. While the machinery was on its way, Rama Reddy, applied to the Deputy Commissioner and obtained the land in front of the village for an upset price of Rs. 27 and soon after the arrival of the machinery, he laid the foundation of a massive building 100 feet long by 40 feet wide. It is built of granite to the height of 10 feet, above which a brick wall raises the height to about 18 feet all around. The roofing is composed of large iron trusses and teakwood covered over with Mangalore tiles.

6. There are ovens for 12 pans, and the construction of the ovens together with the underground tunnel to convey smoke, and the immense chimney which is partly finished, reflect great credit on the ingenuity of Rama Reddy. I may mention that Rama Reddy is illiterate, but his powers of perception and his natural intelligence are great. He informs me that he derived his ideas about the construction of this building and the erection of the plant from the Tileworks at the City of Bangalore to which he was supplying firewood.

7. The cost of the building is roughly estimated about Rs. 5,000 inclusive of the cost of iron trusses. He intends enlarging the building by running a verandah all round, to afford shelter to the workmen and also for the erection of a paddy husking machine and a threshing mill.

8. As regards the working of the mill itself, he informs me that he commenced work on the 5th March 1910, but that he felt great trouble in getting the machinery into working order, so much so that it stopped working on one or two occasions, so as to necessitate experts being brought in to advice him, and finally he was compelled to appoint a native driver on a salary of Rs. 20 per mensem.

9. The average extent of land planted by Rama Reddy, annually is about 20 acres and the number of shoots sown, is on an average about two lakhs and the work of milling this quantity of mature cane used to extend for about three months with 5 ordinary iron mills, and 23 pairs of bullocks working both day and night. But this year a larger extent was planted with 3 lakhs of shoots in view of the arrival of the mill.

10. The work of milling which commenced on the 5th March 1910, will lost till about the 4th June 1910. The mill had to be stopped for about 21 days in April, owing to the village jatra and rain, so that with all the stoppages an interval of about 4 weeks of 28 days has to be excluded from the period the mill has been working, thus bringing the period down to about 2 months.

11. The mill works from 6 A.M. to 6 P.M., and the number of coolies employed is 80. The average yield per diem is 18 bags of sugar or jaggory weighing 7 maunds each or 126 maunds of 25 lbs. each.

12. Rama Reddy informs me that even with this large number of coolies the mill is not sufficiently fed with canes and that the number of ovens are also insufficient to cope with the mill, considering all the difficulties they had to contend with and the increased quantity of three lakhs of canes milled. This year, he feels that the work has been completed with a great deal of saving in time and labour.

13. The benefits which have therefore accrued by this improved method, I am informed, are despatch of work, saving of deteriorating labour to live stock and increased yield roughly about 20 per cent.

Kundlahalli.
Kaggadasa Basavanpura.

This Guruva Reddi pays about Rs. 1,000 kandayam towards Government and owns the marginally noted jodi villages of this taluk.

He plants on an average yearly about 40 to 50 acres with sugar cane and the number of canes raised may roughly be estimated at about five lakhs.

In October 1908, Guruva Reddi secured a loan of Rs. 5,000 from Government and imported the following machinery:—

	Rs.
One sugar cane crushing mill for	... 2,000
One oil engine	... 2,000
Implements and tools	... 500

and the remaining Rs. 500 he spent on erecting buildings to locate the machinery.

The machinery arrived in February 1909 and has worked for the last two seasons of 1909 and 1910. The engine is one of 7½ horse power of the Hornsby patent and the sugar cane mill is one the kind which are now being imported for engine-power.

Guruva Reddi has not erected proper buildings for the plant and ovens, he has put up temporary sheds at Jodi Kundlahalli village in which he has for the present located the machinery, and has carried out the jaggory manufacture for the last two years.

The mill used to work from 6 A.M. to 6 P.M. daily and the number of coolies employed was on an average about 50, and the quantity of jaggory turned out from the 14 ovens daily was 20 bags of seven maunds each.

Guruva Reddi informs me that he intends erecting a large building at a cost of about Rs. 3,000 for this purpose in the near future, with arrangements for the manufacture of refined sugar also; and is in need of expert advice for which he means to apply for to Government.

I am informed that the machinery gave trouble on three or four occasions and stopped action, when men from Bangalore and Urgalli had to be called in to set it right, and on one occasion an expert had to be sent from Messrs. Massey & Co., and that great inconvenience was consequently experienced.

As compared with the old system I am informed that the work of milling the cane and converting it into jaggory by the improved methods, can be done in quarter of the time; with a great deal of saving in manual and animal labour even though the cane is at present carted to the site of the mill from several villages; and the yeild is also reported to be 20 per cent in excess of the old system.

In conclusion, I beg to add that it was strongly represented to me, during my visits to these villages that great inconvenience was experienced for want of adequate knowledge of the machinery and its working, and in some cases, serious loss was also hazarded owing to the machinery suddenly coming to a dead stop which was afterwards attributed to very trifling causes thereby establishing a great necessity for expert guidance in these cases, the necessity for which is further enhanced by the intention on the part of Guruva Reddi to manufacture refined sugar in the near future.

MEMORANDUM.

As personally directed I beg to submit the following report in connection with the sugar cane crushing mill imported by Rama Reddi of Agara village, Begur hobli, Bangalore Taluk.

2. This Rama Reddy, is a wealthy raiyat of the Vakkaliga community paying about Rs. 2,000 kandayam, he owns about 100 head of cattle, a few of which are the finest specimen available in these parts.

3. He informs me that he first conceived the idea of importing a sugar cane mill while attending the lectures at the Agricultural Exhibition at Mysore about the year 1908.

4. Subsequently after hearing of Mr. Urgahalli Krishniengar and Guruva Reddy, having imported similar mills he ordered one from Europe through Messrs. Massey & Co., while the oil engine was purchased from a firm in Calcutta.